

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 17. (Canceled).

18. (Currently Amended) A hand-held short-range radar device for determining a location of objects enclosed in a medium, comprising:

at least one radar sensor that generates a first, high-frequency detection signal for penetrating a medium to be tested in such a way that information about an object enclosed in the medium can be obtained by measuring and analyzing a reflected detection signal of the at least one radar sensor; and

at least one additional sensor for generating at least one additional, second detection signal for obtaining information about the object enclosed in the medium,

wherein the information about the object enclosed in the medium includes position and depth information,

wherein at least one sensor is optimized on the basis of information obtained from the other sensors, and

wherein the optimization occurs by setting the at least one sensor to a program detected by the other sensors.

Claim 19. (Canceled).

20. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, wherein the at least one additional sensor is an inductive sensor.

21. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, wherein the at least one additional sensor is a capacitive sensor.

22. (Previously Presented) The hand-held short-range radar device as recited in Claim 21, wherein at least one electrode of the capacitive sensor is formed by at least one antenna of the at least one radar sensor.

23. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, wherein the at least one additional sensor is a photometric sensor.

24. (Previously Presented) The hand-held short-range radar device as recited in Claim 23, wherein the at least one additional photometric sensor is an infrared sensor.

25. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, further comprising: a housing in to which the at least one radar sensor and the at least one additional sensor are integrated.

26. (Previously Presented) The hand-held short-range radar device as recited in Claim 25, further comprising: a shared PC board onto which the at least one radar sensor and the at least one additional sensor are situated.

27. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, wherein the at least one radar sensor is a wideband pulse radar sensor.

28. (Currently Amended) A method for determining a location of an object enclosed in a medium, comprising:

generating a first, high-frequency detection signal with the aid of at least one antenna of a radar sensor;

transmitting the first detection signal into the medium to be tested, so that information about the object enclosed in the medium is obtained by measuring and analyzing the first detection signal;

analyzing at least one additional, second detection signal for obtaining information about the object enclosed in the medium,

wherein the information about the object enclosed in the medium includes position and depth information,

wherein at least one sensor is optimized on the basis of information obtained from the other sensors, and

wherein the optimization occurs by setting the at least one sensor to a program detected by the other sensors.

29. (Previously Presented) The method as recited in Claim 28, wherein the measuring and analyzing of the first detection signal is performed by measuring a reflected radar signal.

30. (Previously Presented) The method as recited in Claim 28, further comprising: operating at least one antenna of the radar sensor, at least intermittently, as an electrode of an additional sensor.

31. (Previously Presented) The method as recited in Claim 30, wherein the additional sensor is a capacitive sensor.

32. (Previously Presented) The method as recited in Claim 28, wherein the at least one first detection signal and the at least one second detection signal are measured simultaneously.

33. (Previously Presented) The method as recited in Claim 28, wherein the at least one first detection signal and the at least one second detection signal are measured simultaneously.

34. (Previously Presented) The method as recited in Claim 28, wherein the at least one first detection signal and the at least one second detection signal are measured quasi-simultaneously.

35. (Previously Presented) The method as recited in Claim 28, wherein the at least one first detection signal and the at least one second detection signal are measured sequentially.

36. (Previously Presented) The method as recited in Claim 28, wherein the detection signals of a plurality of sensors are measured and analyzed, the sensors originating from a group of sensors which includes at least capacitive sensors, inductive sensors, and photometric sensors.

37. (Previously Presented) The method as recited in Claim 28, wherein at least one detection signal of a sensor is optimized by measuring and analyzing at least one additional detection signal.

38. (Previously Presented) The hand-held short-range radar device as recited in Claim 18, wherein only unambiguous signals are sent downstream to a data processing unit.

39. (Previously Presented) The hand-held short-range radar device as recited in Claim 38, wherein the unambiguous signals are sent downstream to the data processing unit after analysis by an analyzer unit.

Claims 40 and 41: (Canceled).